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| APPLICATION NO. FILING DATE   |                    | FIRST NAMED INVENTOR                | ATTORNEY DOCKET NO.      | CONFIRMATION NO |  |
|---|--------------------|-------------------------------------|--------------------------|-----------------|--|
| 10/522,220  | 09/29/2005         | Dedimuni Rusiru Vinodaka Leelaratne | M2150.0002               | 1592            |  |
| 32172   | 7590 07/05/2006    |                                     | EXAM                     | EXAMINER        |  |
| DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 1177 AVENUE OF THE AMERICAS (6TH AVENUE) |                    |                                     | WIMER, MICHAEL C         |                 |  |
| 41 ST FL.   | DE OF THE AMERICAS | ART UNIT                            | PAPER NUMBER             |                 |  |
| NEW YORK  | , NY 10036-2714    |                                     | 2821                     |                 |  |
|   |                    |                                     | DATE MAIL ED: 07/05/2004 | 4               |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | Application   | on No.  | Applicant(s)  |              |  |  |  |
|--|---|---|---|---|--------------|--|--|--|
| Office Action Summary                                |   | 10/522,22   | <b>!</b> 0  | LEELARATNE ET AL.   |              |  |  |  |
|  |   | Examiner  |   | Art Unit  |              |  |  |  |
|  |   | Michael C   |   | 2828  |              |  |  |  |
| Period fo  | The MAILING DATE of this communic<br>or Reply   | cation appears on the   | cover sheet with the  | correspondence ad   | idress       |  |  |  |
| WHIC<br>- Exte<br>after<br>- If NC<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR CHEVER IS LONGER, FROM THE MAnsions of time may be available under the provisions of SIX (6) MONTHS from the mailing date of this community of the reply is specified above, the maximum state of the reply within the set or extended period for reply wreply received by the Office later than three months afted patent term adjustment. See 37 CFR 1.704(b). | AILING DATE OF TH<br>of 37 CFR 1.136(a). In no evenication,<br>tutory period will apply and will, by statute, cause the app | HIS COMMUNICATIO<br>ent, however, may a reply be ti<br>Il expire SIX (6) MONTHS fron<br>lication to become ABANDONI | N.<br>mely filed<br>n the mailing date of this o<br>ED (35 U.S.C. § 133). |              |  |  |  |
| Status   |   |   |   |   |              |  |  |  |
| 1)□  | Responsive to communication(s) filed  | d on  |   |   |              |  |  |  |
|  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |   |   |   |              |  |  |  |
| 3)   |   |   |   |   |              |  |  |  |
| ,  | closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.   |   |   |   |              |  |  |  |
| Disposit   | ion of Claims   | ·   |   |   |              |  |  |  |
| 4)⊠  | 4)⊠ Claim(s) <u>1-19</u> is/are pending in the application.   |   |   |   |              |  |  |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |   |   |              |  |  |  |
|  | Claim(s) is/are allowed.  |   |   |   |              |  |  |  |
| 6)⊠  | Claim(s) 1-19 is/are rejected.  |   |   |   |              |  |  |  |
| 7)   |   |   |   |   |              |  |  |  |
| 8)   | Claim(s) are subject to restrict  | tion and/or election r  | equirement.   |   |              |  |  |  |
| Applicat   | ion Papers  |   |   |   |              |  |  |  |
| 9)[]   | The specification is objected to by the   | Examiner.   |   |   |              |  |  |  |
| •  | The drawing(s) filed on 9/29/2005 is/a  |   | or b) objected to by  | the Examiner.   |              |  |  |  |
| ,  | Applicant may not request that any object   | •   |   |   |              |  |  |  |
|  | Replacement drawing sheet(s) including  | the correction is requir  | ed if the drawing(s) is o   | bjected to. See 37 C  | FR 1.121(d). |  |  |  |
| 11)  | The oath or declaration is objected to  | by the Examiner. No   | ote the attached Offic  | e Action or form P  | TO-152.      |  |  |  |
| Priority (   | under 35 U.S.C. § 119   |   |   |   |              |  |  |  |
|  | Acknowledgment is made of a claim for All b) Some * c) None of:   |   |   | a)-(d) or (f).  |              |  |  |  |
|  | <ol> <li>Certified copies of the priority documents have been received.</li> <li>Certified copies of the priority documents have been received in Application No</li> </ol>   |   |   |   |              |  |  |  |
|  | 3. Copies of the certified copies of  |   | • •   |   | l Stane      |  |  |  |
|  | application from the Internation  | •   |   | in this realistic   | Clage        |  |  |  |
| * (  | See the attached detailed Office action   | · ·   |   | red.  |              |  |  |  |
|  |   |   |   |   |              |  |  |  |
|  |   |   |   |   |              |  |  |  |
| Attachmer  | , ,   |   | 4) Interview Summar   | w (PTO 412)   |              |  |  |  |
|  | ce of References Cited (PTO-892)<br>ce of Draftsperson's Patent Drawing Review (PT  | TO-948)   | Paper No(s)/Mail [  |   |              |  |  |  |
| 3) X Infor   | mation Disclosure Statement(s) (PTO-1449 or Fer No(s)/Mail Date <u>1/24,3/16,4/25/05</u> .  |   | 5) Notice of Informal 6) Other:   | Patent Application (PT  | O-152)       |  |  |  |

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#### **DETAILED ACTION**

### Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly

claiming the subject matter which the applicant regards as his invention.

2. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding Claim 1, it is unclear what is meant by "to extend generally vertically". Although the specification provides a definition on page 2, lines 23-25, it is unclear in the claim what structure is generally vertical. The support for the antenna, formed as a windshield, would appear to be defined as such, but not in the claim. The antenna arrangement does not appear to extend vertical, unless applicant means the plane of the loop is generally vertical. It appears that applicant intends the support, that is, the window, to be generally in a vertical position as they are in an automobile. Confusion is enhanced in lines 4-5 when there is a recitation of the entry and exit conductors are arranged vertically, as only a part of the antenna extends vertical and the remaining conductors of the loop extend horizontally as clearly recited in Claim 15. Clarification is required so as to define a clear and properly operating device.

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### **Drawings**

- 3. Figure s 1 and 2 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.
- 4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: On page 7, line 28, numeral "28" does not appear in Fig. 3. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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## Claim Rejections - 35 USC § 103

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- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 1-6,10-12 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyahara et al. (6160518).

Regarding Claims 1,2,5,6,14 and 15, Miyahara et al. show in Figures 1 and 2, for example, a vehicle window antenna 14 for digital radio reception, where the dielectric window 11 is arranged vertically within the vehicle 10, the antenna 14 configured as a loop having corner-arranged entry and exit conductors "d" and "j" arranged generally vertically on the window, and wherein the horizontally and vertically-polarized components are equal, all arranged as claimed. A skilled artisan would have found it obvious that one lead of the transmission line is connected to vehicle ground, either at the antenna or the radio. The square configuration in Fig. 6A responds to the vertical and horizontal components of a polarized wave in the same fashion, and may obviously be mounted along the centerline of the window. Similarly, regarding Claims 3 and 4, the antenna may be mounted anywhere convenient as acknowledged by Miyahara et al. at col. 4, lines 2-4, and thus such mounting would have been obvious to the skilled artisan. Application/Control Number: 10/522,220 Page 5

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Regarding Claims 10-12, Miyahara et al. teach the use of an inductor 24,25 connected in series with a capacitor 26 all defining a resonator, and either reactance tunable for proper matching, within the feeder.

## Allowable Subject Matter

- 7. Claims 7-9 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
- 8. The patent to Sauer et al. (3766563) is cited as of interest showing vehicle window antenna arrangements.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C. Wimer whose telephone number is (571) 272-1833. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Minsun O. Harvey can be reached on (571) 272-1835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael C. Wimer Primary Examiner Art Unit 2828

MCW 5/22/2006